

REMARKS

Following entry of this amendment, claims 20 to 40 are pending in the application.

Claims 1 to 19 have been canceled without prejudice or disclaimer. Applicants expressly reserve the right to pursue the subject matter of those claims in the future. Support for new claim 20 can be found in the specification, e.g., at original claims 1 and 6, and at page 2, paragraphs [0005] and [0008]; at page 4, paragraph [00014]. Support for new claim 21 can be found in the specification, e.g., at original claim 2. Support for new claims 22 and 27 can be found in the specification, e.g., at original claim 3. Support for new claims 23 and 28 can be found in the specification, e.g., at original claim 4. Support for new claims 24 and 29 can be found in the specification, e.g., at original claim 5. Support for new claims 25 and 30 can be found in the specification, e.g., at original claim 8. Support for new claims 26 and 31 can be found in the specification, e.g., at original claim 9. Support for new claim 32 can be found in the specification, e.g., at original claim 1. Support for new claim 33 can be found in the specification, e.g., at original claims 10 and 16, and at page 2, paragraphs [0005] and [0008]; at page 4, paragraph [00014]. Support for new claims 34 to 40 can be found in the specification, e.g., at original claims 11 to 15, 18, and 19, respectively. New claims 20 to 41 add no new matter.

The specification has been amended at page 4, paragraph [00015] to correct a typographical error. That amendment adds no new matter.

Objection to the Specification

The Examiner objected to the specification because of alleged informalities, and stated that "Paragraph [0017]: 'The different' is suggested to be changed to – The difference --." Action at page 2. Applicants note that the language objected to by the Examiner is found in

paragraph [00015], and have amended that paragraph as suggested by the Examiner.

Reconsideration and withdrawal of the objection to the specification is respectfully requested.

Rejection under 35 U.S.C. § 102

The Examiner rejected claims 1 to 5, 8, 10, 12 to 15, and 18 under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Publication No. US 2004/0010069 (Hong). Action at page 3. Specifically, the Examiner alleged that Hong discloses “a rubber composition comprising a rubber, a carbon black filler or a mixture of two or more carbon black, and plasticizing oils, wherein this composition can be used for windshield wiper blade (claims 1, 4, 15, and 33).” *Id.*

Applicants respectfully traverse. Solely to expedite prosecution and without acquiescing to the rejection, applicants have canceled claims 1 to 19 and have added claims 20 to 40. Applicants will therefore briefly address the rejection with respect to the new claims.

Claims 20 and 33 are independent claims. Independent claim 20 recites “[a] rubber material which contains at least one type of rubber...at least one of the types of rubber having a first fraction and a second fraction, which in the unvulcanized state differ with respect to their viscosity....” Independent claim 33 recites “[a] wiper blade for windscreen wipers, characterized by at least one type of rubber...at least one of the types of rubber having a first fraction and a second fraction, which in the unvulcanized state differ with respect to their viscosity....” Thus, claim 20 includes the elements of canceled claim 6, and claim 33 includes the elements of canceled claim 16. Neither canceled claim 6 nor canceled claim 16 was rejected as allegedly anticipated by Hong. Accordingly, applicants assert that claims 20 and 33 are also not anticipated by Hong. Claims 21 to 32 ultimately depend from claim 20, and claims 34 to 40 ultimately depend from claim 33, and thus, those claims are also not anticipated by Hong. Applicants need not, and do not, address the Examiner’s contentions with respect to certain

elements of certain rejected claims. By not addressing those contentions, applicants in no way acquiesce to them.

Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §102(e) over Hong.

Rejections under 35 U.S.C. §103

The Examiner rejected claims 6, 7, 16, and 17 under 35 U.S.C. §103(a) as allegedly being obvious over Hong in view of U.S. Publication No. US 2002/0099142 (Faulkner). Action at page 4. The Examiner acknowledged that Hong fails to teach “the specific rubber fractions which differ in viscosity.” *Id.* The Examiner alleged, however, that Faulkner “discloses an elastomer composition comprising two phases which have different viscosities (claim 1, Table 3) to achieve a better control of the reaction process ([0033]).” *Id.* (emphasis omitted.) The Examiner contended that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the composition with the specific rubber fractions which differ in viscosity with the expected success.” *Id.*

Applicants respectfully traverse. As noted above, claims 1 to 19 have been canceled and claims 20 to 40 have been added. Applicants will therefore address the rejection with respect to the new claims. Independent claim 20 recites:

20. A rubber material which contains at least one type of rubber, at least one filler and processing aids, the filler comprising a mixture of at least two different types of carbon black, and at least one of the types of rubber having a first fraction and a second fraction, which in the unvulcanized state differ with respect to their viscosity, characterized in that the overall viscosity of the unvulcanized rubber material is in a range of 30 to 60 Mooney.

Independent claim 33 recites:

33. A wiper blade for windscreen wipers, characterized by a rubber material which contains at least one type of rubber, at least one filler and processing aids, the filler comprising a mixture of at least two different types of carbon black, and at least one of the types of rubber having a first fraction and a

second fraction, which in the unvulcanized state differ with respect to their viscosity, characterized in that the overall viscosity of the unvulcanized rubber material is in a range of 30 to 60 Mooney.

Claims 21 to 32 ultimately depend from claim 20, and claims 34 to 40 ultimately depend from claim 33.

Applicants assert that Faulkner fails to teach and would not have suggested “a rubber material which contains at least one type of rubber... at least one of the types of rubber having a first fraction and a second fraction, which in the unvulcanized state differ with respect to their viscosity,” as recited in claims 20 and 33. Applicants assert that Faulkner discusses dynamic vulcanization of a mixture of two *different* FKMs, and not a rubber material having a first fraction and second fraction of the *same type* of rubber.

Moreover, the use of two different FKMs is necessary to Faulkner’s method. Faulkner teaches that “[t]he difference in reactivity is great enough to selectively vulcanize a general-purpose FKM (fluoroelastomer phase 1) with diamine or bisphenol while mixing with a peroxide-vulcanizable FKM grade or grades (fluoroelastomer phase 2).” Faulkner at page 2, paragraph [0031]. Further, “[t]he **distinguishing feature of combinations that work** is that the elastomers that comprise fluoroelastomer phase 1 must be more reactive with the selected diamine-, polyamine-, bisphenol-, or polypheno-based cure systems than the elastomers that comprises fluoroelastomer phase 2.” *Id.*, paragraph [0032] (emphasis added).

Table 1 gives “nine examples of dynamically vulcanized FKM compounds of the present invention,” all of which are “based on an FKM dipolymer or non-peroxide-crosslinkable FKM copolymer (fluoroelastomer phase 1) dynamically vulcanized in a peroxide-curable FKM (fluoroelastomer phase 2).” *Id.* at page 3, paragraph [0043]. According to Faulkner’s specification, an FKM dipolymer is “derived from only two monomers, vinylidene fluoride and hexafluoropropene.” *Id.* at page 2, paragraph [0023]. A non-peroxide-crosslinkable FKM

copolymer contains those two monomers plus at least a third monomer, which may be tetrafluoroethylene, ethylene, and/or perfluorovinylethers.” *Id.*, paragraph [0024]. Finally, a peroxide-curable FKM contains similar monomers as the non-peroxide-crosslinkable FKM, but with “one or more special reactive cure site monomers that confer peroxide-reactivity to the polymer.” *Id.*, paragraph [0025]. Thus, Faulkner teaches mixtures containing two *different* FKMs, and not a first fraction and second fraction of the *same type* of rubber, as recited in claims 20 and 33. Moreover, Faulkner teaches away from the use of a combination of a first fraction and a second fraction of the same type of rubber, because such combinations would not dynamically vulcanize, which is the “distinguishing feature of combinations that work,” according to Faulkner.

Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a) over Hong in view of Faulkner.

The Examiner rejected claims 9 and 19 under 35 U.S.C. §103(a) as allegedly being obvious over Hong in view of Japanese Publication No. JP 09071699 (Tsuda). Action at page 4. The Examiner acknowledged that Hong fails to teach a “material free of zinc oxide.” *Id.* The Examiner alleged, however, that Tsuda “discloses a rubber composition comprising EPDM and carbon black and is free from metal oxide to provide stable volume resistivity for applications in office automation instruments (abstract, claim 10).” *Id.* at page 5. The Examiner contended that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the composition without the zinc oxide with the expected success.” *Id.*

Applicants respectfully traverse. As noted above, claims 1 to 19 have been canceled, and claims 20 to 40 have been added. Canceled claims 9 and 19, which are the subject of the present

rejection, each recited a rubber material that “is essentially free of zinc oxide.” New claims 26, 31, and 40 recite rubber material that “is essentially free from zinc oxide.” Accordingly, applicants will address the rejection with respect to new claims 26, 31, and 40.

Claims 26 and 31 ultimately depend from claim 20, and claim 40 depends from claim 33. As discussed above, claims 20 and 33 each recite “a rubber material which contains at least one type of rubber... at least one of the types of rubber having a first fraction and a second fraction, which in the unvulcanized state differ with respect to their viscosity...” Applicants assert, as discussed above, that Hong does not anticipate claims 20 and 33. Further, Tsuda fails to remedy the deficiencies of Hong.¹ Accordingly, applicants need not, and do not, address the Examiner’s contentions with respect to Tsuda and certain elements of certain claims. By not addressing those contentions, applicants in no way acquiesce to them.

Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a) over Hong in view of Tsuda.

The Examiner rejected claim 11 under 35 U.S.C. §103(a) as allegedly obvious over Hong in view of U.S. Patent No. 6,195,833 (Geilenkirchen). Action at page 5. The Examiner acknowledged that Hong fails to teach “the different rubber materials to be used in different parts of the wiper blade.” *Id.* The Examiner stated, however, that Geilenkirchen teaches “a wiper blade comprising head part is made of CR and wiper lip is made of BR to provide smooth head part for easy insertion and better wear resistance from the wiper lip (claim 9, col. 2, lines 64-67, col. 3, lines 4-7).” *Id.* The Examiner alleged that “it would have been obvious to one of

¹ Applicants assert that Tsuda also fails to remedy the deficiencies of the combination of Hong and Faulkner.

ordinary skill in the art at the time the invention was made to make the composition with the different rubber materials for different parts of the wiper blade with the expected success.” *Id.*

Applicants respectfully traverse. As noted above, claims 1 to 19 have been canceled, and claims 20 to 40 have been added. Canceled claim 11, which is the subject of the present rejection, recited a wiper blade “characterized in that a head part (1) and/or a web (2) of the wiper blade is made of EPDM and/or CR and a wiper lip (4) of the wiper blade is made of BR.” New claim 34 recites similar language. Accordingly, applicants will address the rejection with respect to new claim 34.

Claim 34 depends from claim 33. As discussed above, claim 33 recites “a rubber material which contains at least one type of rubber... at least one of the types of rubber having a first fraction and a second fraction, which in the unvulcanized state differ with respect to their viscosity....” Applicants assert, as discussed above, that Hong does not anticipate claim 33. Further, Geilenkirchen fails to remedy the deficiencies of Hong.² Accordingly, applicants need not, and do not, address the Examiner’s contentions with respect to Geilenkirchen and certain elements of claim 34. By not addressing those contentions, applicants in no way acquiesce to them.

Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a) over Hong in view of Geilenkirchen.

Applicants assert that the present application is in condition for allowance and respectfully request that the Examiner issue a timely Notice of Allowance. In the event the

² Applicants assert that Geilenkirchen also fails to remedy the deficiencies of the combination of Hong and Faulkner.

Examiner finds the application not allowable, applicants request that the Examiner telephone the undersigned to set up an interview.

Respectfully submitted,



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